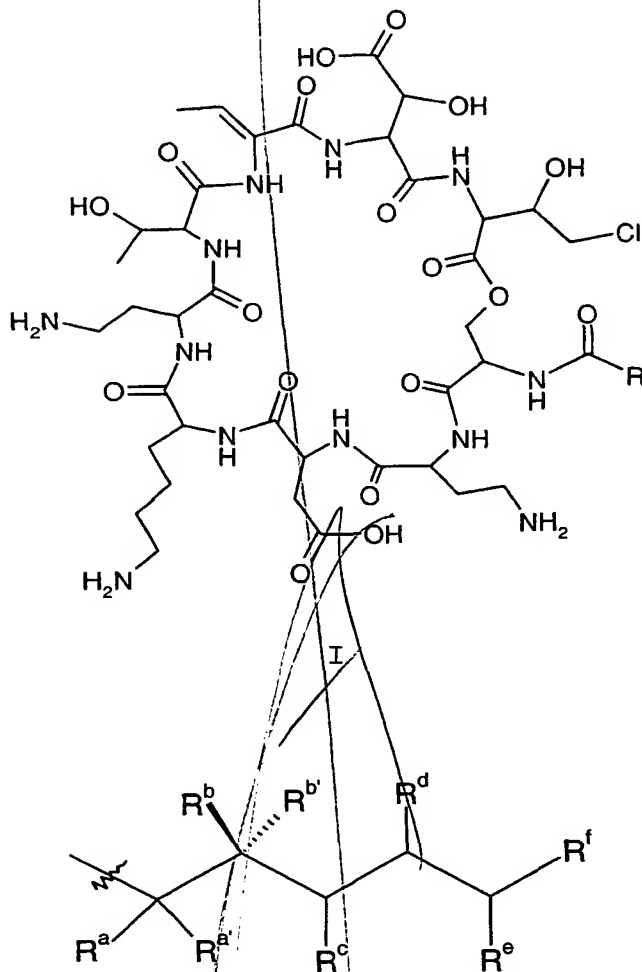


WE CLAIM:

1. A compound represented by structure I



5 wherein R is

where

$R^a$  and  $R^{a'}$  are independently hydrogen or methyl, or either  $R^a$  or  $R^{a'}$  is alkyl amino, taken together with  $R^b$  or  $R^{b'}$  forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with  $R^c$  forms a six-membered aromatic ring;

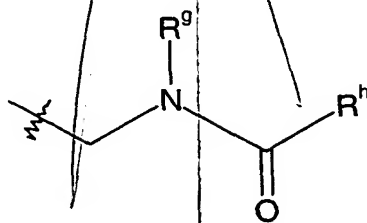
$R^b$  and  $R^{b'}$  are independently hydrogen, halogen, or methyl, or either  $R^b$  or  $R^{b'}$  is amino, alkylamino,  $\alpha$ -acetoacetate, methoxy, or hydroxy provided that  $R^{b'}$  is not hydroxy when  $R^a$ ,  $R^b$ ,  $R^d$ ,  $R^e$  are hydrogen,  $R^c$  is hydrogen and  $R^f$  is *n*-hexyl, *n*-octyl or *n*-decyl, or  $R^a$ ,  $R^b$ ,  $R^d$ ,  $R^e$  are hydrogen,  $R^c$  is hydroxy and  $R^f$  is *n*-octyl, *n*-nonyl, or *n*-decyl;

$R^c$  is hydrogen, hydroxy,  $C_1$ - $C_4$  alkoxy, hydroxyalkoxy, or taken together with  $R^e$  forms a 6-membered aromatic ring or  $C_5$ - $C_6$  cycloalkyl ring;

$R^e$  is hydrogen, or taken together with  $R^f$  is a six-membered aromatic ring,  $C_5$ - $C_{14}$  alkoxy substituted six-membered aromatic ring, or  $C_5$ - $C_{14}$  alkyl substituted six-membered aromatic ring, and

$R^f$  is  $C_8$ - $C_{18}$  alkyl,  $C_5$ - $C_{11}$  alkoxy, or biphenyl; or

R is

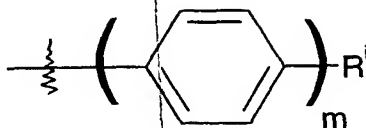


where

$R^g$  is hydrogen, or  $C_1$ - $C_{13}$  alkyl, and

$R^h$  is  $C_1$ - $C_{15}$  alkyl,  $C_4$ - $C_{15}$  alkoxy, ( $C_1$ - $C_{10}$  alkyl)phenyl,  $-(CH_2)_n$ -aryl, or  $-(CH_2)_n$ -( $C_5$ - $C_6$  cycloalkyl), where  $n = 1-2$ ; or

R is

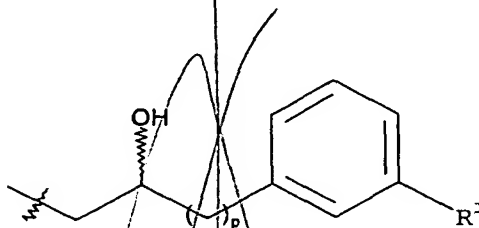


5

where

$R^i$  is a hydrogen, halogen, or  $C_5$ - $C_8$  alkoxy, and  $m$  is 1, 2 or 3;

R is

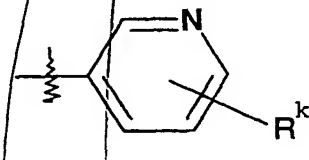


10

where

$R^j$  is  $C_5$ - $C_{14}$  alkoxy or  $C_5$ - $C_{14}$  alkyl, and  $p = 0, 1$  or 2;

R is



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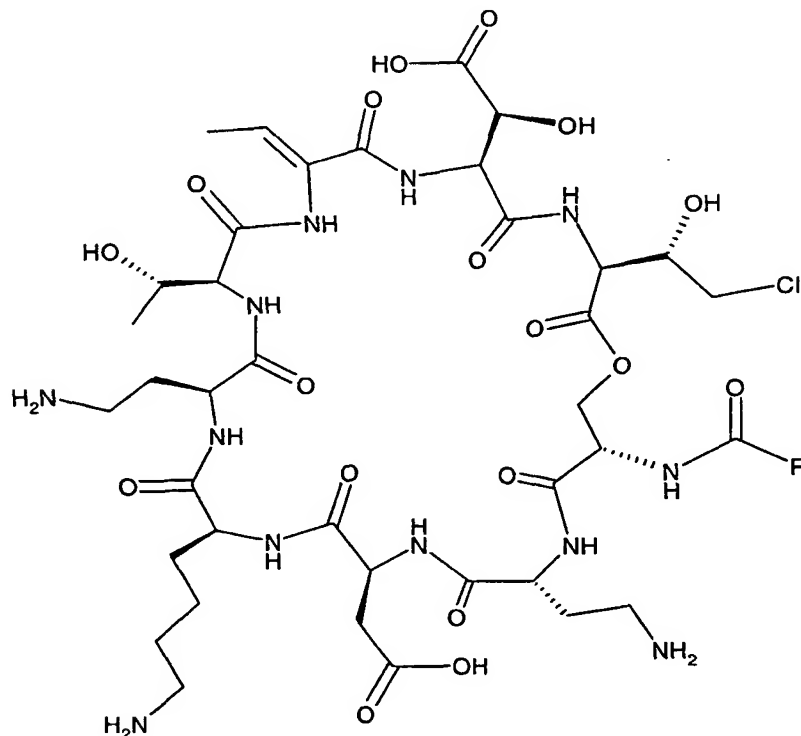
where

$R^k$  is  $C_5$ - $C_{14}$  alkoxy; or

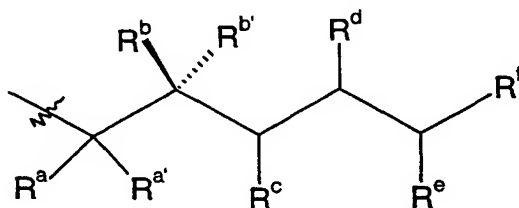
R is  $-(CH_2)-NR^m-(C_{13}-C_{18} \text{ alkyl})$ , where  $R^m$  is H,  $-CH_3$  or

-C(O)CH<sub>3</sub>; and  
pharmaceutically acceptable salts and solvates thereof.

2. The compound of Claim 1 wherein structure I has  
5 the following stereochemistry



3. The compound of Claim 1 wherein R is



10            where

$R^a$  and  $R^{a'}$  are independently hydrogen or methyl, or either  $R^a$  or  $R^{a'}$  is alkyl amino, taken together with  $R^b$  or  $R^{b'}$  forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with  $R^c$  forms a six-membered aromatic ring;

$R^b$  and  $R^{b'}$  are independently hydrogen, halogen, or methyl, or either  $R^b$  or  $R^{b'}$  is amino, alkylamino,  $\alpha$ -acetoacetate, methoxy, or hydroxy provided that  $R^{b'}$  is not hydroxy when  $R^a$ ,  $R^b$ ,  $R^d$ ,  $R^e$  are hydrogen,  $R^c$  is hydrogen and  $R^f$  is *n*-hexyl, *n*-octyl or *n*-decyl, or  $R^a$ ,  $R^b$ ,  $R^d$ ,  $R^e$  are hydrogen,  $R^c$  is hydroxy and  $R^f$  is *n*-octyl, *n*-nonyl, or *n*-decyl;

$R^c$  is hydrogen, hydroxy,  $C_1$ - $C_4$  alkoxy, hydroxyalkoxy, or taken together with  $R^e$  forms a 6-membered aromatic ring or  $C_5$ - $C_6$  cycloalkyl ring;

$R^e$  is hydrogen, or taken together with  $R^f$  is a six-membered aromatic ring,  $C_5$ - $C_{14}$  alkoxy substituted six-membered aromatic ring, or  $C_5$ - $C_{14}$  alkyl substituted six-membered aromatic ring, and

$R^f$  is  $C_8$ - $C_{18}$  alkyl,  $C_5$ - $C_{11}$  alkoxy, or biphenyl.

4. The compound of Claim 3 wherein  $R^{b'}$  is hydroxy provided that  $R^c$  is not hydrogen when  $R^a$ ,  $R^b$ ,  $R^d$ ,  $R^e$  are

hydrogen and  $R^f$  is *n*-hexyl, *n*-octyl or *n*-decyl, or  $R^c$  is not hydroxy when  $R^f$  is *n*-octyl, *n*-nonyl, or *n*-decyl.

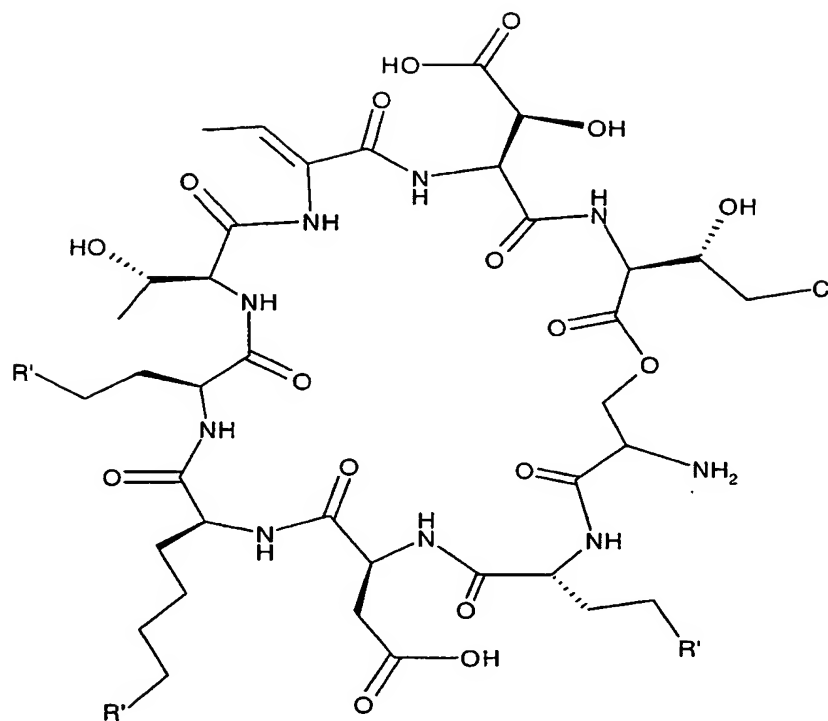
5. The use of a compound as claimed in any one of the preceding claims in the preparation of a medicament for use in combating either systemic fungal infections or fungal skin infections.

6. A pharmaceutical formulation comprising a pseudomycin compound of Claim 2 and a pharmaceutically acceptable carrier.

7. A method for treating an antifungal infection in an animal in need thereof, comprising the steps of administering to said animal a pseudomycin compound of Claim 2.

8. A process for producing a pseudomycin nucleus comprising the steps of providing a pseudomycin compound having an N-acyl alkyl side-chain containing at least one gamma or delta hydroxy group and reacting said pseudomycin compound with an acid to produce said pseudomycin nucleus.

9. The process of Claim 8 wherein said pseudomycin nucleus is represented by structure I-A



I-A

wherein R' is -NH<sub>2</sub> or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.

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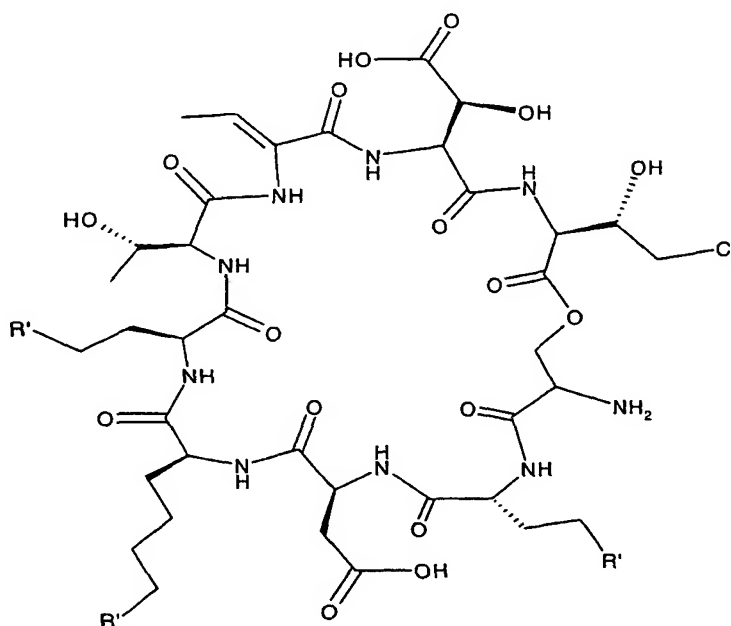
10. The process of Claim 8 wherein said pseudomycin compound having an N-acyl alkyl side-chain containing at least one gamma or delta hydroxy group is selected from the group consisting of pseudomycin A, pseudomycin A' and pseudomycin C.

11. The process of Claim 8 wherein said acid is trifluoroacetic acid or acetic acid.

12. The process of Claim 11 wherein said acid is trifluoroacetic acid.

13. A pseudomycin nucleus prepared by the process of  
5 Claim 8.

14. The pseudomycin nucleus of Claim 13 wherein said nucleus is represented by structure I-A

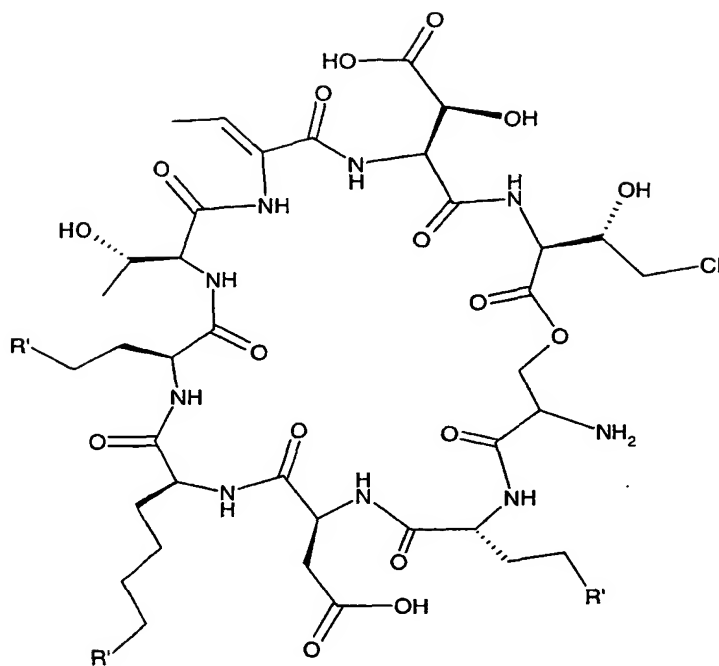


I-A

wherein R' is -NH<sub>2</sub> or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.

15. A pseudomycin nucleus represented by structure I-A



**I-A**

wherein R' is -NH<sub>2</sub> or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.

5

ADP  
A3